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4.30. PLASMA PHYSICS

4.30.20. Basic Properties of Plasmas

4.30.20.20. Thermodynamics of Plasmas

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4.30.30. Plasma Production and Heating

4.30.30.10. Plasma Sources and Discharges

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4.30.40. Plasma Flows

4.30.40.20. MHD Flows

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4.30.50. Plasma Waves and Instabilities

4.30.50.10. General Theory and Measurement Techniques

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4.35. QUANTUM FLUIDS

4.35.20. Statistical Properties of Quantum Fluids

4.35.20.20. Boson Systems

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5.10.30. Crystal Defects

5.10.30.60. Interstitials and Vacancies

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5.10.30.70. Dislocations

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5.15. LATTICE DYNAMICS

5.15.20. Phonons and Vibrations in Crystal Lattices

5.15.20.60. Phonon–Electron Interactions

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5.20. ENERGY STATES IN SOLIDS

5.20.20. Energy Band Structure and Fermi Surfaces of Specific Types of Materials

5.20.20.15. Metals and Semimetals

Doppler Shifted Cyclotron Resonance in Cadmium (E/T)—O. V. Konstantinov, V. G. Skobov, V. V. Lavrova, L. M. Fisher and V. A. Yudin. 36(1), 118–26 (Jan. 1973); CPM-7305D0652

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5.20.20.90. Other Materials

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5.20.25. Localized Electron States and Other Electronic Theories or Models

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5.20.40. Level Splitting and Interactions in Crystals

5.20.40.40. Nuclear States and Interactions

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5.20.40.90. Other Topics in Level Splitting

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5.20.50. Quasiparticles and Complex Centers

5.20.50.10. Excitons

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5.20.65. Solid-State Plasmas, Hot Carriers and Helicons

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5.25. MECHANICAL AND ACOUSTICAL PHENOMENA

5.25.70. Mechanical and Acoustic Waves in Solids

5.25.70.10. General Theory and Measurement Techniques

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5.25.70.90. Other Topics in Mechanical and Acoustic Waves in Solids

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5.30. THERMAL AND THERMODYNAMIC PHENOMENA

5.30.40. Phase Properties of Systems

5.30.40.30. Structural Transformation (e.g. Polymorphic, Martensitic, etc.)

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5.35. TRANSPORT PHENOMENA

5.35.30. Electronic Conduction in Metals and Alloys

5.35.30.40. Magnetoelectric and Other Magnetotransport Effects

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5.35.40. Electronic Conduction in Semiconductors and Insulators

5.35.40.70. Magnetoelectric and Other Magnetotransport Effects

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5.80.25. Impact Phenomena of Surfaces

5.80.25.20. Laser Impact Phenomena

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